

CLAIMS

We claim:

1. A wheelchair pushrim system comprising:
 - a) a pushrim;
 - b) a wheel connected to the pushrim; and
 - c) an insert compressibly fit between the pushrim and the wheel.
2. The system of claim 1 wherein the insert is made of a substantially elastic material.
3. The system of claim 2 wherein the insert is a concave trough.
4. The system of claim 1 wherein the pushrim is substantially hollow.
5. The system of claim 4 wherein the pushrim has an elongated circular cross-section.
6. The system of claim 4 wherein the pushrim has an oval cross-section.
7. The system of claim 4 wherein the pushrim further comprises at least one rib which improves structural strength.
8. The system of claim 1 wherein the insert has a gripping texture.
9. The system of claim 1 wherein the pushrim has a substantially smooth texture.
10. The system of claim 1 wherein the pushrim is connected to the wheel with at least one tab mount.
11. The system of claim 1 wherein the pushrim is connected to the wheel with at least one rivet-nut mount.
12. The system of claim 1 wherein the insert is coated with neoprene.
13. A wheelchair pushrim system comprising:
 - a) a pushrim having a non-circular cross-section;
 - b) a wheel;
 - c) a connector connecting the pushrim to the wheel; and
 - d) an insert fit between the pushrim and the wheel.
14. The system of claim 13 wherein the insert is compressibly fit between the pushrim and the wheel.

15. The system of claim 13 wherein the pushrim has an elongated circular cross-section.
16. The system of claim 13 wherein the pushrim has an oval cross-section.
17. The system of claim 13 wherein the pushrim further comprises at least one support rib.
18. The system of claim 13 wherein the insert has a gripping texture.
19. The system of claim 13 wherein the pushrim has a substantially smooth texture.
20. A wheelchair pushrim system comprising:
 - a) a pushrim;
 - b) a wheel connected to the pushrim, wherein the pushrim has:
 - i. an elongated circular cross-section; and
 - ii. a support rib;
 - c) an insert compressibly fit between the pushrim and the wheel, wherein the insert:
 - i. is made of a substantially elastic material;
 - ii. is a concave trough; and
 - iii. has a gripping texture.
21. The system of claim 20 wherein the insert is coated with neoprene.
22. A metal pushrim comprising:
 - a) a substantially hollow tube of metal bent into a substantially circular shape, the cross-section of the tube comprising:
 - (i) a first round end having a first wall thickness;
 - (ii) a second round end having a second wall thickness; and
 - (iii) a substantially flat first side and a substantially flat second side connecting the first round end to the second round end.
23. The system of claim 22 wherein the pushrim is manufactured from a single piece of metal.
24. The system of claim 22 wherein:
 - a) the first wall thickness is about 0.05 inches to about 0.06 inches; and
 - b) the second wall thickness is about 0.05 inches to about 0.06 inches.

25. A method of making a hollow metal pushrim, having a non-circular cross-section of substantially uniform thickness, comprising the steps of:
- a) extruding a substantially hollow tube of metal in which its cross-section has:
 - (i) a first round end having a first wall thickness;
 - (ii) a second round end having a second wall thickness, where the second wall thickness is greater than the first wall thickness; and
 - (iii) a first side and a second side connecting the first round end to the second round end; and
 - b) bending the tube into a circular shape to form a pushrim, where the first round end is the inside diameter of the pushrim.